

Growth Mechanism of Super Long and Aligned Single-Walled Carbon Nanotubes

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Recently progress in nanotube synthesis makes it possible to grow individual single walled carbon nanotubes (SWNTs) to several centimeters long along a direction defined by the gas flow. The growth of long nanotubes and the control of the growth direction not only makes it possible to produce nanotube structures in a controller manner, it also revealed some insight of the nanotube growth mechanism in general, especially the termination mechanism for nanotube growth. The talk will provided detailed analysis of the growth mechanism of these long and aligned nanotubes.